INDEX TO VOLUME 112

INDEX TO SUBJECTS

Apsidal Motion of Giant Binary Stars, The. *Lloyd Motz* 434

R Aquarii, 1936–1949, The Spectrum of. *Paul W. Merrill* 514

Auroral Spectrum, A New Band System of N_2^+ in the Infrared. *A. B. Meinel* 562

Binary Stars, The Apsidal Motion of Giant. *Lloyd Motz* 434

C_2 Molecule, On the Identification of the 3670 A Band of the. *John G. Phillips* . . . 131

C_2 and N_2^+, Theoretical Computations of Transition Probabilities for Electronic Spectra of. *Harrison Shull* 352

C_2 Swan Bands, On the Transition Probabilities of. *N. R. Tawde and J. M. Patel* . . 210

β Canis Majoris, W. F. Meyer's Work on. *Otto Struve* 520

γ Cassiopeiae, The Radial Velocity of. *Burke Smith and O. Struve* 192

TW Cassiopeiae, TY Puppis, and VV Ursae Majoris, Spectrographic Observations of the Eclipsing Binaries. *Otto Struve* 184

CQ Cephei, Photometric Investigations of the Wolf-Rayet Binary. *W. A. Hiltner* . . 477

U Cephei, A Study of the Spectroscopic Binary. *Robert H. Hardie* 542

Cluster NGC 2362, The Color-Magnitude Array for the Galactic. *Harold L. Johnson* . 240

Cluster from Proper Motions, On the Determination of the Convergent Point of a Moving. *Archibald Brown* 225

Composite Spectra, Radial Velocities of Six Stars Having. *William C. White, Jr.* . . 559

Degenerate Stars, Apparent Magnitudes and Color Indices for Seventy-four White Dwarfs and. *W. J. Luyten* 212

Eclipsing Binaries TW Cassiopeiae, TY Puppis, and VV Ursae Majoris, Spectrographic Observations of the. *Otto Struve* 184

Eclipsing Variable Stars, On the Change of Period of. *Frank Bradshaw Wood* . . . 196

Energy Generation, A Note on. *I. Epstein* 207

F Dwarfs, A Spectroscopic Comparison between High- and Low-Velocity. *Martin and Barbara Schwarzschild* 248

F- and Early G-Type Stars, A Correlation between the Spectroscopic and Dynamical Characteristics of the Late. *Nancy G. Roman* 554

G-Type Stars, A Correlation between the Spectroscopic and Dynamical Characteristics of the Late F- and Early. *Nancy G. Roman* 554

YY Geminorum (Castor C), The Spectrum of. *O. Struve, G. Herbig, and H. Horak* . . 216

Globular Cluster M 15, Twenty-nine New Variable Stars in the. *L. Rosino* 221

HD 193576, A Spectrographic Study of. *Guido Münch* 266

Interstellar Clouds, On the Doppler Broadening of Absorption Lines by Turbulence and by Multiple. *Su-shu Huang* 399

17 Leporis, Note on the Infrared Spectrum of. *Arne Slettebak* 559

Magnitudes and Color Indices for Seventy-four White Dwarfs and Degenerate Stars, Apparent. *W. J. Luyten* . . . 212

Magnitudes and Colors of Stars in Selected Areas 57, 61, and 68, Photoelectric. *Joel Stebbins, A. E. Whitford, and H. L. Johnson* . . . 469

Milky Way, The Theory of the Fluctuations in Brightness of the. I. *S. Chandrasekhar and G. Münch* . . . 380

Milky Way, The Theory of the Fluctuations in Brightness of the. II. *S. Chandrasekhar and G. Münch* . . . 393

UX Monocerotis, The Light-Curve of. *W. A. Hiltner, O. Struve, and P. D. Jose* . . . 504

N_2^+ in the Infrared Auroral Spectrum, A New Band System of. *A. B. Meinel* . . . 562

N_2^+, Theoretical Computations of Transition Probabilities for Electronic Spectra of C_2 and. *Harrison Shull* . . . 352

N_2O Bands in the Infrared Solar Spectrum, Fine Structure of. *Marcel V. Migeotte* . . . 136

Night Sky, O_2 Emission Bands in the Infrared Spectrum of the. *A. B. Meinel* . . . 464

Night Sky, *OH* Emission Bands in the Spectrum of the. II. *A. B. Meinel* . . . 120

O_2 Emission Bands in the Infrared Spectrum of the Night Sky. *A. B. Meinel* . . . 464

OH Emission Bands in the Spectrum of the Night Sky. II. *A. B. Meinel* . . . 120

GP Orionis, The Spectrum of. *William P. Bidelman* . . . 219

Photoelectric Studies. IV. Color-Luminosity Array for Stars in the Region of the Sun. *Olin J. Eggen* . . . 141

Planetary Atmospheres, Diffuse Reflection by. *Henry G. Horak* . . . 445

Pleiades, The Balmer Series and the Parallax of the. *G. R. Miczaika* . . . 361

Polarization by Interstellar Grains, The Amount of. *H. C. van de Hulst* . . . 1

Pulsation Properties of Giant-Star Models. *I. Epstein* . . . 6

TY Puppis, and VV Ursae Majoris, Spectrographic Observations of the Eclipsing Binaries TW Cassiopeiae. *Otto Struve* . . . 184

Radial Velocities of Six Stars Having Composite Spectra. *William C. White, Jr.* . . . 559

Radial Velocities, Spectral Types, and Luminosity Classes of 820 Stars. *J. H. Moore and G. F. Paddock* . . . 48

Radial Velocity of γ Cassiopeiae, The. *Burke Smith and O. Struve* . . . 192

Radiative Equilibrium in an Atmosphere in Which Pure Scattering and Pure Absorption Both Play a Role. *A. D. Code* . . . 22

Reviews:

PREY, ADALBERT. *Einführung in die sphärische Astronomie* (K. Aa. Strand) . . . 224

Scattering by a Moving Electron Atmosphere and Its Effect on Spectral Lines. I. The Schuster Problem. *Frank N. Edmonds, Jr.* . . . 307

Scattering by a Moving Electron Atmosphere and Its Effect on Spectral Lines. II. The Planetary Nebula Problem. *Frank N. Edmonds, Jr.* . . . 324

Solar Atmosphere, The Thermodynamic Structure of the Outer. II. Comment on Empirical Determinations of b_n and T_e. *Richard N. Thomas* . . . 337

Solar Limb Darkening between 0.5 and 10.2 μ, Observations of. *A. K. Pierce, R. R. McMath, Leo Goldberg, and O. C. Mohler* . . . 289

Solar Spectrum, Fine Structure of N_2O Bands in the Infrared. *Marcel V. Migeotte* . . . 136

Spectra Have a Bright *Hα* Line, Additional Stars Whose. *Paul W. Merrill and Cora G. Burwell* . . . 72
Spectra in Milky Way Regions, Stellar. II. A Region in Cygnus. *S. W. McCuskey and C. K. Seyfert* . . . 90
Spectral Lines on Atmospheric Temperature, The Effect of Pressure Broadening of. *John Strong and Gilbert N. Plass* . . . 365
Spectrographic Observations of the Eclipsing Binaries TW Cassiopeiae, TY Puppis, and VV Ursae Majoris. *Otto Struve* . . . 184
Spectrographic Observations of W Ursae Majoris. *Otto Struve and Henry G. Horak* . . . 178
Spectrographic Study of HD 193576, A. *Guido Münch* . . . 266
Spectroscopic Binary U Cephei, A Study of the. *Robert H. Hardie* . . . 542
Spectroscopic Comparison between High- and Low-Velocity F Dwarfs, A. *Martin and Barbara Schwarzschild* . . . 248
Spectroscopic and Dynamical Characteristics of the Late F- and Early G-Type Stars, A Correlation between the. *Nancy G. Roman* . . . 554
Spectrum of R Aquarii, 1936–1949, The. *Paul W. Merrill* . . . 514
Spectrum, Fine Structure of N_2O Bands in the Infrared Solar. *Marcel V. Migeotte* . . . 136
Spectrum of YY Geminorum (Castor C), The. *O. Struve, G. Herbig, and H. Horak* . . . 216
Spectrum of 17 Leporis, Note on the Infrared. *Arne Slettebak* . . . 559
Spectrum, A New Band System of N_2^+ in the Infrared Auroral. *A. B. Meinel* . . . 562
Spectrum of the Night Sky, O_2 Emission Bands in the Infrared. *A. B. Meinel* . . . 464
Spectrum of the Night Sky, *OH* Emission Bands in the. II. *A. B. Meinel* . . . 120
Spectrum of GP Orionis, The. *William P. Bidelman* . . . 219
Star Streaming, Dynamics of. II. *P. Stehle* . . . 299
Stellar Atmospheres, Superthermic Phenomena in. VI. Comment on Regions of Emission Fluctuation in the Solar Atmosphere. *Richard N. Thomas* . . . 343
Supergiants on the System of the Yerkes Spectral Atlas, Revised Standards for. *W. W. Morgan and Nancy G. Roman* . . . 362
Transition Probabilities for Electronic Spectra of C_2 and N_2^+, Theoretical Computations of. *Harrison Shull* . . . 352
Turbulence in the Atmospheres of the Sun and the Stars, On. *Su-shu Huang* . . . 418
Turbulence and the Curve of Growth. *Marshal H. Wrubel* . . . 424
Turbulence and by Multiple Interstellar Clouds, On the Doppler Broadening of Absorption Lines by. *Su-shu Huang* . . . 399
W Ursae Majoris, Spectrographic Observations of. *Otto Struve and Henry G. Horak* . . . 178
VV Ursae Majoris, Spectrographic Observations of the Eclipsing Binaries TW Cassiopeiae, TY Puppis, and. *Otto Struve* . . . 184
Variable Stars in the Globular Cluster M 15, Twenty-nine New. *L. Rosino* . . . 221
White Dwarf Stars, Note on the Proton-Proton Reaction in. *T. D. Lee* . . . 561
White Dwarfs and Degenerate Stars, Apparent Magnitudes and Color Indices for Seventy-four. *W. J. Luyten* . . . 212
Wolf-Rayet Binary CQ Cephei, Photometric Investigations of the. *W. A. Hiltner* . . . 477
Zeeman Shifts for Stellar Dipoles and Quadrupoles with Inclined Axes. *Martin Schwarzschild* . . . 222

INDEX TO AUTHORS

BIDELMAN, WILLIAM P. The Spectrum of GP Orionis 219

BROWN, ARCHIBALD. On the Determination of the Convergent Point of a Moving Cluster from Proper Motions 225

BURWELL, CORA G., and PAUL W. MERRILL. Additional Stars Whose Spectra Have a Bright *Hα* Line 72

CHANDRASEKHAR, S., and G. MÜNCH. The Theory of the Fluctuations in Brightness of the Milky Way. I. 380

CHANDRASEKHAR, S., and G. MÜNCH. The Theory of the Fluctuations in Brightness of the Milky Way. II. 393

CODE, A. D. Radiative Equilibrium in an Atmosphere in Which Pure Scattering and Pure Absorption Both Play a Role 22

EDMONDS, FRANK N., JR. Scattering by a Moving Electron Atmosphere and Its Effect on Spectral Lines. I. The Schuster Problem 307

EDMONDS, FRANK N., JR. Scattering by a Moving Electron Atmosphere and Its Effect on Spectral Lines. II. The Planetary Nebula Problem 324

EGGEN, OLIN J. Photoelectric Studies. IV. Color-Luminosity Array for Stars in the Region of the Sun 141

EPSTEIN, I. A Note on Energy Generation 207

EPSTEIN, I. Pulsation Properties of Giant-Star Models 6

GOLDBERG, LEO, A. K. PIERCE, R. R. MCMATH, and O. C. MOHLER. Observations of Solar Limb Darkening between 0.5 and 10.2 μ 289

HARDIE, ROBERT H. A Study of the Spectroscopic Binary U Cephei 542

HERBIG, G., O. STRUVE, and H. HORAK. The Spectrum of YY Geminorum (Castor C) . 216

HILTNER, W. A. Photometric Investigations of the Wolf-Rayet Binary CQ Cephei . . 477

HILTNER, W. A., O. STRUVE, and P. D. JOSE. The Light-Curve of UX Monocerotis . . 504

HORAK, H., O. STRUVE, and G. HERBIG. The Spectrum of YY Geminorum (Castor C) . 216

HORAK, HENRY G. Diffuse Reflection by Planetary Atmospheres 445

HORAK, HENRY G., and OTTO STRUVE. Spectrographic Observations of W Ursae Majoris 178

HUANG, SU-SHU. On the Doppler Broadening of Absorption Lines by Turbulence and by Multiple Interstellar Clouds 399

HUANG, SU-SHU. On Turbulence in the Atmospheres of the Sun and the Stars 418

JOHNSON, H. L., JOEL STEBBINS, and A. E. WHITFORD. Photoelectric Magnitudes and Colors of Stars in Selected Areas 57, 61, and 68 469

JOHNSON, HAROLD L. The Color-Magnitude Array for the Galactic Cluster NGC 2362 . 240

JOSE, P. D., W. A. HILTNER, and O. STRUVE. The Light-Curve of UX Monocerotis . . 504

LEE, T. D. Note on the Proton-Proton Reaction in White Dwarf Stars 561

LUYTEN, W. J. Apparent Magnitudes and Color Indices for Seventy-four White Dwarfs and Degenerate Stars 212

McCuskey, S. W., and C. K. Seyfert. Stellar Spectra in Milky Way Regions. II. A Region in Cygnus . . . 90
McMath, R. R., A. K. Pierce, Leo Goldberg, and O. C. Mohler. Observations of Solar Limb Darkening between 0.5 and 10.2 μ . . . 289
Meinel, A. B. A New Band System of N_2^+ in the Infrared Auroral Spectrum . . . 562
Meinel, A. B. O_2 Emission Bands in the Infrared Spectrum of the Night Sky . . . 464
Meinel, A. B. *OH* Emission Bands in the Spectrum of the Night Sky. II . . . 120
Merrill, Paul W. The Spectrum of R Aquarii, 1936–1949 . . . 514
Merrill, Paul W., and Cora G. Burwell. Additional Stars Whose Spectra Have a Bright *Hα* Line . . . 72
Miczaika, G. R. The Balmer Series and the Parallax of the Pleiades . . . 361
Migeotte, Marcel V. Fine Structure of N_2O Bands in the Infrared Solar Spectrum . 136
Mohler, O. C., A. K. Pierce, R. R. McMath, and Leo Goldberg. Observations of Solar Limb Darkening between 0.5 and 10.2 μ . . . 289
Moore, J. H., and G. F. Paddock. Radial Velocities, Spectral Types, and Luminosity Classes of 820 Stars . . . 48
Morgan, W. W., and Nancy G. Roman. Revised Standards for Supergiants on the System of the Yerkes Spectral Atlas . . . 362
Motz, Lloyd. The Apsidal Motion of Giant Binary Stars . . . 434
Münch, G., and S. Chandrasekhar. The Theory of the Fluctuations in Brightness of the Milky Way. I. . . . 380
Münch, G., and S. Chandrasekhar. The Theory of the Fluctuations in Brightness of the Milky Way. II. . . . 393
Münch, Guido. A Spectrographic Study of HD 193576 . . . 266
Paddock, G. F., and J. H. Moore. Radial Velocities, Spectral Types, and Luminosity Classes of 820 Stars . . . 48
Patel, J. M., and N. R. Tawde. On the Transition Probabilities of C_2 Swan Bands . 210
Phillips, John G. On the Identification of the 3670 A Band of the C_2 Molecule . . . 131
Pierce, A. K., R. R. McMath, Leo Goldberg, and O. C. Mohler. Observations of Solar Limb Darkening between 0.5 and 10.2 μ . . . 289
Plass, Gilbert N., and John Strong. The Effect of Pressure Broadening of Spectral Lines on Atmospheric Temperature . . . 365
Roman, Nancy G. A Correlation between the Spectroscopic and Dynamical Characteristics of the Late F- and Early G-Type Stars . . . 554
Roman, Nancy G., and W. W. Morgan. Revised Standards for Supergiants on the System of the Yerkes Spectral Atlas . . . 362
Rosino, L. Twenty-nine New Variable Stars in the Globular Cluster M 15 . . . 221
Schwarzschild, Barbara, and Martin Schwarzschild. A Spectroscopic Comparison between High- and Low-Velocity F Dwarfs . . . 248
Schwarzschild, Martin. Zeeman Shifts for Stellar Dipoles and Quadrupoles with Inclined Axes . . . 222
Schwarzschild, Martin, and Barbara Schwarzschild. A Spectroscopic Comparison between High- and Low-Velocity F Dwarfs . . . 248

SEYFERT, C. K., and S. W. MCCUSKEY. Stellar Spectra in Milky Way Regions. II. A Region in Cygnus 90
SHULL, HARRISON. Theoretical Computations of Transition Probabilities for Electronic Spectra of C_2 and N_2^+ 352
SLETTEBAK, ARNE. Note on the Infrared Spectrum of 17 Leporis 559
SMITH, BURKE, and O. STRUVE. The Radial Velocity of γ Cassiopeiae 192
STEBBINS, JOEL, A. E. WHITFORD, and H. L. JOHNSON. Photoelectric Magnitudes and Colors of Stars in Selected Areas 57, 61, and 68 469
STEHLE, P. Dynamics of Star Streaming. II. 299
STRAND, K. Aa. Review of: *Einführung in die sphärische Astronomie*, Adalbert Prey . . 224
STRONG, JOHN, and GILBERT N. PLASS. The Effect of Pressure Broadening of Spectral Lines on Atmospheric Temperature 365
STRUVE, O., and BURKE SMITH. The Radial Velocity of γ Cassiopeiae 192
STRUVE, O., G. HERBIG, and H. HORAK. The Spectrum of YY Geminorum (Castor C) . 216
STRUVE, O., W. A. HILTNER, and P. D. JOSE. The Light-Curve of UX Monocerotis . . 504
STRUVE, OTTO. Spectrographic Observations of the Eclipsing Binaries TW Cassiopeiae, TY Puppis, and VV Ursae Majoris 184
STRUVE, OTTO. W. F. Meyer's Work on β Canis Majoris 520
STRUVE, OTTO, and HENRY G. HORAK. Spectrographic Observations of W Ursae Majoris 178
TAWDE, N. R., and J. M. PATEL. On the Transition Probabilities of C_2 Swan Bands . . 210
THOMAS, RICHARD N. Superthermic Phenomena in Stellar Atmospheres. VI. Comment on Regions of Emission Fluctuation in the Solar Atmosphere 343
THOMAS, RICHARD N. The Thermodynamic Structure of the Outer Solar Atmosphere. II. Comment on Empirical Determinations of b_n and T_e 337
VAN DE HULST, H. C. The Amount of Polarization by Interstellar Grains 1
WHITE, WILLIAM C., JR. Radial Velocities of Six Stars Having Composite Spectra . . 559
WHITFORD, A. E., JOEL STEBBINS, and H. L. JOHNSON. Photoelectric Magnitudes and Colors of Stars in Selected Areas 57, 61, and 68 469
WOOD, FRANK BRADSHAW. On the Change of Period of Eclipsing Variable Stars . . . 196
WRUBEL, MARSHAL H. Turbulence and the Curve of Growth 424